

SEQUENCE LISTING

<110> Novozymes A/S
Nielsen, Jack Bech
Kjaerulff, Soren

<120> Transgenic Plant Expressing Maltogenic Alpha-Amylase

<130> 5753.204-US

<140> 09/831,656

<141> 2001-05-11

<150> PCT/DK99/00624

<151> 1999-11-12

<160> 4

<170> PatentIn version 3.1

<210> 1

<211> 2160

<212> DNA

<213> Bacillus sp.

<400> 1
atgaaaaaga aaacgctttc tttatttgtg ggactgatgc tcctcatcgg tcttctgttc 60
agcggttctc ttccgtacaa tccaaacgcc gctgaagcca gcagttccgc aagcgtcaaa 120
ggggacgtga tttaccagat tatcattgac cggttttacg atggggacac gacgaacaac 180
aatcctgcc aaggttatgg actttacgat cggaccaa atcgaagtggaa aatgtattgg 240
ggcgggggatc tggagggggg tgcgtcaaaa cttccttata ttaaacagct gggcgtaacg 300
acaatctggg tgtccccggg tttggacaat ctggatacac tggcggggcac cgataaacg 360
ggctatcacg gatactggac gcgcgatttt aaacagattg aggaacattt cgggaattgg 420
accacatttg acacgttggg caatgatgct caccaaaacg gaatcaagg gattgtcgac 480
tttgtgcca atcattcgac tccttttaag gcaaacgatt ccacctttgc ggaaggcggc 540
gccctctaca acaatggaac ctatatgggc aattattttg atgacgcaac aaaagggtac 600
ttccaccata atggggacat cagcaactgg gacgaccggg acgaggcgca atggaaaaac 660
ttcacggatc cagccggttt ctcgcttgcc gatttgcgc aggaaaatgg cacgattgct 720
caatacctga ccgatgcggc ggttcaattg gtagcacatg gagcggatgg tttgcggatt 780

gatgcggtga agcatttttaa ttcgggggttc tccaaatcgt tggccgataa actgtaccaa	840
aagaaagaca ttttcctggt gggggaatgg tacggagatg accccggaac agccaatcat	900
ctggaaaagg tccggtacgc caacaacagc ggtgtcaatg tgctggattt tgatctcaac	960
acggtgattc gaaatgtgtt cggcacattt acgcaaacga tgtacgatct taacaatatg	1020
gtgaaccaa cggggaacga gtacaaatac aaagaaaatc taatcacatt tatcgataac	1080
catgatatgt caagatttct ttcggtaaata tcgaacaagg cgaatttgca ccaggcgctt	1140
gctttcattc tcacttcgcy ggggtacgcc tccatctatt atggaaccga acaatacatg	1200
gcaggcggca atgaccgta caaccggggg atgatgccg cgtttgatac gacaaccacc	1260
gcctttaaag aggtgtcaac tctggcgggg ttgcgcagga acaatgcggc gatccagtac	1320
ggcaccacca cccagcggtg gatcaacaat gatgtttaca tttatgaacg gaaatttttc	1380
aacgatgtcg tggtggtggc catcaatcga aacacgcaat cctcctattc gatttccggt	1440
ttgcagacgg ccttgccaaa tggcagctat gcggattatc tgtcagggct gttggggggg	1500
aacgggattt ccgtttccaa tggaagtgtc gcttcgttca cgcttgcgcc tggagccgtg	1560
tctgtttggc agtacagcac atccgcttca gcgccgaaa tcggatcggt tgctccaaat	1620
atggggattc cgggtaatgt ggtcacgatc gacgggaaag gttttgggac gacgcaggga	1680
accgtgacat ttggcggagt gacagcgact gtgaaatcct ggacatccaa tcggattgaa	1740
gtgtacgttc ccaacatggc cgccgggctg accgatgtga aagtcaccgc gggaggagtt	1800
tccagcaatc tgtattctta caatattttg agtggaacgc agacatcggt tgtgtttact	1860
gtgaaaagtg cgctccgac caacctgggg gataagattt acctgacggg caacataccg	1920
gaattgggga attggagcac ggatacgagc ggagccgtta acaatgcgca agggcccctg	1980
ctcgcgcca attatccgga ttggttttat gtattcagcg ttccagcagg aaagacgatt	2040
caattcaagt tcttcatcaa gcgtgcggat ggaacgattc aatgggagaa tggttcgaac	2100
cacgtggcca caactcccac ggggtgaacc ggtaacatta ctgttacgtg gcaaaaactag	2160

<210> 2
 <211> 719
 <212> PRT
 <213> Bacillus sp

<400> 2

Met Lys Lys Lys Thr Leu Ser Leu Phe Val Gly Leu Met Leu Leu Ile
1 5 10 15

Gly Leu Leu Phe Ser Gly Ser Leu Pro Tyr Asn Pro Asn Ala Ala Glu
20 25 30

Ala Ser Ser Ser Ala Ser Val Lys Gly Asp Val Ile Tyr Gln Ile Ile
35 40 45

Ile Asp Arg Phe Tyr Asp Gly Asp Thr Thr Asn Asn Asn Pro Ala Lys
50 55 60

Ser Tyr Gly Leu Tyr Asp Pro Thr Lys Ser Lys Trp Lys Met Tyr Trp
65 70 75 80

Gly Gly Asp Leu Glu Gly Val Arg Gln Lys Leu Pro Tyr Leu Lys Gln
85 90 95

Leu Gly Val Thr Thr Ile Trp Leu Ser Pro Val Leu Asp Asn Leu Asp
100 105 110

Thr Leu Ala Gly Thr Asp Asn Thr Gly Tyr His Gly Tyr Trp Thr Arg
115 120 125

Asp Phe Lys Gln Ile Glu Glu His Phe Gly Asn Trp Thr Thr Phe Asp
130 135 140

Thr Leu Val Asn Asp Ala His Gln Asn Gly Ile Lys Val Ile Val Asp
145 150 155 160

Phe Val Pro Asn His Ser Thr Pro Phe Lys Ala Asn Asp Ser Thr Phe
165 170 175

Ala Glu Gly Gly Ala Leu Tyr Asn Asn Gly Thr Tyr Met Gly Asn Tyr
180 185 190

Phe Asp Asp Ala Thr Lys Gly Tyr Phe His His Asn Gly Asp Ile Ser
195 200 205

Asn Trp Asp Asp Arg Tyr Glu Ala Gln Trp Lys Asn Phe Thr Asp Pro
210 215 220

Ala Gly Phe Ser Leu Ala Asp Leu Ser Gln Glu Asn Gly Thr Ile Ala
225 230 235 240

Gln Tyr Leu Thr Asp Ala Ala Val Gln Leu Val Ala His Gly Ala Asp
245 250 255

Gly Leu Arg Ile Asp Ala Val Lys His Phe Asn Ser Gly Phe Ser Lys
260 265 270

Ser Leu Ala Asp Lys Leu Tyr Gln Lys Lys Asp Ile Phe Leu Val Gly
275 280 285

Glu Trp Tyr Gly Asp Asp Pro Gly Thr Ala Asn His Leu Glu Lys Val
290 295 300

Arg Tyr Ala Asn Asn Ser Gly Val Asn Val Leu Asp Phe Asp Leu Asn
305 310 315 320

Thr Val Ile Arg Asn Val Phe Gly Thr Phe Thr Gln Thr Met Tyr Asp
325 330 335

Leu Asn Asn Met Val Asn Gln Thr Gly Asn Glu Tyr Lys Tyr Lys Glu
340 345 350

Asn Leu Ile Thr Phe Ile Asp Asn His Asp Met Ser Arg Phe Leu Ser
355 360 365

Val Asn Ser Asn Lys Ala Asn Leu His Gln Ala Leu Ala Phe Ile Leu
370 375 380

Thr Ser Arg Gly Thr Pro Ser Ile Tyr Tyr Gly Thr Glu Gln Tyr Met
385 390 395 400

Ala Gly Gly Asn Asp Pro Tyr Asn Arg Gly Met Met Pro Ala Phe Asp
405 410 415

05831656-090304

Pro Pro Thr Asn Leu Gly Asp Lys Ile Tyr Leu Thr Gly Asn Ile Pro
 625 630 635 640

Glu Leu Gly Asn Trp Ser Thr Asp Thr Ser Gly Ala Val Asn Asn Ala
 645 650 655

Gln Gly Pro Leu Leu Ala Pro Asn Tyr Pro Asp Trp Phe Tyr Val Phe
 660 665 670

Ser Val Pro Ala Gly Lys Thr Ile Gln Phe Lys Phe Phe Ile Lys Arg
 675 680 685

Ala Asp Gly Thr Ile Gln Trp Glu Asn Gly Ser Asn His Val Ala Thr
 690 695 700

Thr Pro Thr Gly Ala Thr Gly Asn Ile Thr Val Thr Trp Gln Asn
 705 710 715

<210> 3
 <211> 33
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> FNP 110

<400> 3
 tcccccgga tgagcagttc cgcaagcgtc aaa

33

<210> 4
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> RNP 110

<400> 4
 cgatgagctc ctagtgtttgc cacgt

25



Creation date: 10-14-2003
Indexing Officer: TDANG5 - TIEN DANG
Team: OIPEBackFileIndexing
Dossier: 09831656

Legal Date: 06-21-2001

No.	Doccode	Number of pages
1	M905	2

Total number of pages: 2

Remarks:

Order of re-scan issued on